



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,765	08/03/2001	Yasushi Konuma	212089US6	5944
22850	7590	04/07/2005	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			NATNAEL, PAULOS M	
		ART UNIT		PAPER NUMBER
				2614

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/920,765	KONUMA, YASUSHI	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paulos M. Natnael	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 23 March 2005.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 15 and 16 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

## DETAILED ACTION

1. Upon further consideration and search, the previously indicated allowability of claims 15 and 16 has been withdrawn because of the newly found references. Examiner regrets the inconvenience this may cause the applicant. However, this is necessary in order to conduct a thorough examination of the claimed subject matter.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 15 and 16 are rejected under 35 U.S.C. 102(e) as being Worrell by U.S. 6,690,425.**

Considering claims 15 and 16, Worrell discloses an aspect ratio control arrangement in a video display comprising multiple format video source 502, a receiver 504 comprising front end 508, demodulator 510, format detector/controller 512 and decoder and format controller 514, display driver 518 and television display 506. Worrell discloses that the decoder and format controller 514 decodes the digital video source material and selects the image aspect ratio format of the displayed image for display on display screen 506,

in accordance with a user selected image aspect ratio. Col. 3, lines 3-7 Worrell teaches "For a display device having a 4:3 physical aspect ratio, the display driver 518 would display the 16:9 source aspect ratio in a letterbox format such that bands of black screen (cropping) appear at the top and bottom of the displayed video. Such a display 600 is shown in FIG. 6. The format detector 512 is coupled to the decoder and format controller 514 and produces an output signal 512a. Format detector 512 detects a change in the source aspect ratio of the incoming video source signal. In carrying out an inventive feature, when a change in the video signal aspect ratio format would tend to produce a distortion in the image, the user's selected aspect ratio format for the image will be automatically overridden to provide a suitable different image aspect ratio format. Thereby, the displayed image will display the picture information of the incoming source material in an undistorted manner. For digital source material, the format detector 512 can monitor the bitstream information that contains an indicator of the source aspect ratio for the material embedded in the bitstream. For analog source material, the format detector 512 can monitor the chrominance signal for a DC offset that can exist when there is a 16:9 aspect ratio signal being received. [emphasis added by examiner] Automatic letterbox detectors are also known that examine luminance data. A 4:3 aspect ratio signal does not generate a DC offset in the chrominance signal. As such, for either a digital video source or an analog video source, the format detector 512 can detect the appropriate image aspect ratio format for displaying the source material. " see col. 3, lines 18-47 Therefore, the reference of Worrell meets the claims as claimed.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tani et al., U.S. 5,760,840 in view of Worrell U.S. 6,690,425.

Considering claims 15 and 16, Tani et al. disclose an apparatus for distinguishing between a plurality of video signal types and automatic aspect ratio determination for a television receiver. Tani et al disclose as illustrated on Fig.20 a receiving signal selecting part 41, aspect ratio detecting part 45, subtitle processing part 47, and a microcomputer 53, controls each block mentioned above by inputted and outputted signals through a bus bar 56. (see columns 11-13) As shown variously on Figs. 2A,2B, 5A and B, 10, 13A, 14A, 14B, and 21, the system of Tani detects the black, imageless, or non-picture portion of the input signal. The system of Tani et al detects also whether there is additional data such as subtitle included in the video signal and if so the system process it using the subtitle detecting 47. In particular, Tani et al disclose that "...The aspect ratio detecting part 45 has a function of an automatic aspect ratio discrimination apparatus, samples brightness levels of the inputted luminance signal and generates a brightness histogram at every scanning line. The video kind is discriminated from the shape of the histogram and the picture top position E and the picture bottom position F

are detected as boundary points between different kinds of video signals as shown in FIG. 21(a). The picture top position E and the picture bottom position F are detected as a time from the vertical sync signal outputted from the Y/C processing part 44. The above-mentioned detecting signal is inputted to the subtitle processing part 47 and is used as a subtitle processing signal when there is a subtitle in the black portion of the letter box picture and at the same time and the detecting signal is inputted to the micro computer 53 through the bus bar 56 and is inputted to the driving part 54 as a control signal from the micro computer 53. (see col. 12, lines 13-34)

Furthermore, Tani et al. teaches an apparatus for discriminating kinds of video signals and an automatic aspect ratio discrimination apparatus and a television receiver using it in accordance with the present invention detects an accurate picture top position, an accurate bottom position and an accurate subtitle position for the letter box signal having no aspect ratio discrimination signal by using a histogram generation circuit (comparison circuit, counters), an edge detection circuit and a temporal filter. see col. 12, line 63 to col. 13, line 2.

Tani et al apparently utilize the multiple versions of the input video signal.

Worrell on the other hand teaches receiving multiple format video sources. The multiple format video source 502 is illustratively one or more source devices including, but not limited to, a DVD player, a set top box, a source of high definition television signals, a cable television source, an off-the-air television source, and the like. See col. 2, lines 47-52

It would have been obvious to the skilled in the art at the time the invention was made to modify the system of Tani et al. by providing the multiple format video sources detection and processing of Worrell in order to make the system of Tani et al. more versatile. Doing so would make the system of Tani et al versatile because now it would be able to process not only versions of a video signal but would also detect and process a plurality of different video signals.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mori et al., U.S. Pat. No. 6,002,797 discloses an apparatus for detecting position of featuring region of picture, such as subtitle or imageless part.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paulos M. Natnael whose telephone number is (703) 305-0019. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (703) 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ALONSO M. NATNAEL  
[REDACTED] EXAMINER

PMN  
April 2, 2005